EFFECTS OF COOPERATIVE LEARNING USING LEARNING TOGETHER TECHNIQUE IN MODALITY AND RULE OF LAW COURSE ON LEARNING ACHIEVEMENT OF SEVENTH GRADE STUDENTS IN HENAN PROVINCE

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ABSTRACT

This experimental research aimed to: 1) compare learning achievement before and after learning through learning together technique of cooperative learning, 2) compare learning achievement after learning through learning together technique of cooperative learning with the criterion set at 70 percent and 3) assess the student's satisfaction on learning together technique of cooperative learning . The sample of this study was 30 students in Grade 7(1classroom) from Chuangyi School in Zhengzhou City , which was derived by using cluster random sampling method. The research instruments were as follows: 1)The appropriateness of the lesson plans were based on learning together technique of cooperative learning at very high level (M=4.52, SD= 0.5), 2) multiple choice for learning achievement with a difficulty (p=0.33-0.77)and discrimination (r=0.2-0.67)and reliability index of .79, and 3) a student satisfaction questionnaire with a reliability index of 0.72. The statistics used to analyze data were mean, standard deviation, t-test for dependent samples and t-test for one sample.

The results revealed that 1) after using the Learning together technique of cooperative learning, the Learning Achievement ability after learning through Learning together technique of cooperative learning (M=22.63, SD=3.85) than before (M=17.05, SD=3.62 ,) at statistically significant level of .01(t = 10.636, p < .01); 2) the learning achievement was higher than the determined criterion of 70% at a significance level of .01 (M=22.63, SD=3.85, t = 2.321, p< .01); and 3) the students' satisfaction after learning through Learning together technique of cooperative learning was at a higher level. (M=4.22, SD=0.75 ,).

Keywords

Cooperative Learning ,Learning together ,Learning Achievement, Students ' Satisfaction

Significance of the problems

The Moral and Rule of Law Curriculum Standards for Compulsory Education (2022 Edition) highlights the need to emphasize students' active roles in learning by encouraging independent and cooperative inquiry. This pedagogical orientation supports the shift away from traditional, teacher-centered models, a shift that has been increasingly evident since the launch of China's basic education curriculum reforms. National policy documents reinforce this direction. The State Council's Decision on the Reform and Development of Basic Education (China, 2001) affirms that cooperative learning fosters mutual exchange and growth among students and teachers. Later, in 2019, the CPC Central Committee and the State Council issued recommendations to deepen educational reform through integrated subject teaching and the promotion of research-based, project-based, and cooperative learning approaches (China, 2019). In response to these reforms, cooperative learning has been widely applied in junior high school Morality and Rule of Law classes. It addresses the need for students to acquire not only textbook knowledge but also critical life skills, including collaboration, problem-solving, and social responsibility. The once-common resistance from students toward group learning has significantly diminished. Thus, the integration of cooperative learning into the classroom represents a practical and vivid realization of national curriculum reform and societal expectations.

Cooperative learning, defined as an instructional method in which teachers organize students into small groups that work together to support one another's academic growth (Slavin, 2011), has been widely recognized for its positive effects on academic achievement and social skills development (Johnson & Johnson, 2009; Slavin, 2014). In the context of the Morality and the Rule of Law course, cooperative learning not only enhances students' academic engagement but also fosters critical moral reasoning, social attitudes, and values formation, which are essential for students' holistic development (Dong, 2023; Abedin, 2019).

However, despite these recognized benefits, there is a notable gap in empirical research examining the specific effects of cooperative learning on moral education outcomes within junior high schools in China. Wang (2020) highlights the lack of in-depth studies focused on this educational context, and Chen et al. (2021) emphasize the scarcity of clear evidence regarding the application of cooperative learning strategies in moral and social education. Addressing this research gap is crucial for informing teaching practices that better cultivate students' moral competence and classroom engagement.

Therefore, this study aims to investigate the effects of cooperative learning, specifically through the Learning Together technique, on the academic achievement and moral development of seventh-grade students in the Morality and the Rule of Law course at Chuangyi School. By doing so, the study seeks to provide empirical insights into how cooperative learning can be effectively integrated into moral education to enhance student outcomes.

Research questions

The research questions were as follows:

1. How is learning achievement of students before and after learning through learning together technique of cooperative learning ?

2. How is learning achievement of students after learning through learning together technique of cooperative learning comparing with determined criterion of 70 percent?

3. What is the student's satisfaction toward learning together technique of cooperative learning after learning through learning together technique of cooperative learning ?

Research objectives

1. To compare learning achievement before and after learning through learning together technique of cooperative learning.

2. To compare learning achievement after learning through learning together technique of cooperative learning with the criterion set at 70 percent.

3. To assess the student's satisfaction toward learning together technique of cooperative learning .

Research findings

This study employed a one-group pretest-posttest experimental design with the following objectives to:

1) compare learning achievement before and after learning through learning together technique of cooperative learning.

2) compare learning achievement after learning through with the criterion set at 70 percent. and

3) assess the student's satisfaction on learning together technique of cooperative learning .

The population in this study is 60 students(2classrooms) in Grade7 from Zhengzhou City Henan Province. The sample of this study was 30 students in Grade 7(1classroom) from Chuangyi School in Zhengzhou City , which was derived by using cluster random sampling method.

The research instruments were as follows:

1) The appropriateness of the lesson plans were based on learning together technique of cooperative learning at very high level (M=4.52, SD= 0.5),

2) multiple choice for learning achievement with a difficulty (p=0.33-0.77), discrimination (r=0.2-0.67)and reliability of .79, and

3) a student satisfaction questionnaire with a reliability of 0.72.

The statistics used to analyze data were mean, standard deviation, t-test for dependent samples and t-test for one sample.

The study results are as follows:

1. The result of comparing learning achievement before and after learning through learning together technique of cooperative learning.

Table 1 The result of comparing the mean score of learning achievement ability before and after learning through Learning together technique of cooperative learning.

Group	Full scores	n	Pretest scores		Post test scores		t	p
			M	SD	M	SD		
Experimental group	30	30	17.03	3.62	22.63	3.85	10.636**	.001

* * $p < 0.01$.

As presented in Table 1, the mean scores of pretest of students' learning achievement was 17.03 (SD = 3.62) and post test of students' learning achievement was 22.63(SD =3.85). The result of this table showed that after learning through Learning together technique of cooperative learning, post test scores of students' learning achievement was higher than pretest scores at .01 level of statistical significance (t_{29} =10.636, p < .01). The average scores of the study developed increasingly higher than pretest.

2. The result of comparing the mean score of learning achievement of students after learning through Learning together technique of cooperative learning with the determined criterion set at 70 percent of full scores.

Table 2 The result that the average score of learning achievement after learning with learning together technique of cooperative learning with the determined criterion set at 70 percent of full scores. (Full score = 30)

Group	n	criterion score	M	SD	t	p
Experimental group	30	21	22.63	3.85	2.321**	0.001

** p < 0.01

As presented in Table 2, the mean scores of the students' learning achievement after learning through Learning together technique of cooperative learning was 22.63 from a full marks of 30 and the SD was3.85. Which was statistically higher than the criterion of 70% at .05 level of statistical significance (t_{29}=2.321,p< .01).

It can be seen that the learning achievement of the students who learning through Learning together technique of cooperative learning are higher than 70%.

3. The results of research to assess the student's satisfaction toward on the Learning together technique of cooperative learning.

Table 3 The results of students' satisfaction after learning through Learning together technique of cooperative learning.

Items	M	SD	Satisfaction level
Learning aspect			
1.Interactions in the classroom include changes in communication between classmates or teachers and students.	4.27	0.74	High level
2.Learning together technique of cooperative learning, you can take the initiative to complete the tasks assigned by the teacher.	4.13	0.82	High level
3.In the Learning together technique of cooperative learning classroom teaching, you can participate in the group discussions.	4.33	0.66	High level
total	4.24	0.74	High level
Instructional strategy			
4.You completed the pre-class study task list on time.	4.07	0.78	High level
5.You interact and communicate in class to enhance your ability of independent exploration and learning.	4.23	0.73	High level
6.You work with groups to learn in class to arouse enthusiasm and participation.	4.30	0.84	High level
7.Teachers give personalized guidance to students.	4.20	0.81	High level
8.Teachers' collective guidance strategy for existing problems.	4.27	0.78	High level
total	4.21	0.79	High level
Teaching efficiency			
9.Compared with the traditional classroom, I like the Learning together technique of cooperative learning teaching method.	4.13	0.78	High level
10.You believe that you have mastered the content of the course activities provided to you by the teacher.	4.23	0.77	High level
11.With Learning together technique of cooperative	4.07	0.78	High level

Items	M	SD	Satisfaction level
learning, you can actively answer the teacher's questions.			
total	4.14	0.78	High level
Instructional evaluation			
12.The degree to which you think you have completed the learning task of the pre-class video.	4.17	0.79	High level
13.In the Learning together technique of cooperative learning class, you can feel a deeper understanding of the knowledge points through the teacher's solution of the pre-class problems, the systematic teaching of the knowledge, and the discussion of the problems between the students.	4.40	0.62	High level
14.You think using Learning together technique of cooperative learning will improve your grades.	4.13	0.68	High level
15.You feel that Learning together technique of cooperative learning will deepen your understanding of what you are learning.	4.30	0.65	High level
Total	4.25	0.69	High level
Over all	4.22	0.75	High level

As shown in table 3, the overall results of the high level by students are high level with (M=4.22, SD = 0.75). Thus, it was concluded that, students' satisfaction of the students after receiving High level was high level and each item were followed this: Satisfaction of whether the teaching content of the morality and the rule of law course learning aspect novelty at high level with (M=4.24, SD=0.74), satisfaction of whether the teaching content of the morality and the rule of law course instructional strategy is easy to understand were at high level with (M=4.21, SD=0.78), satisfaction with whether the teaching content of the morality and the rule of law course teaching efficiency can stimulate were at high level with (M=4.14, SD=0.77) and satisfaction with whether the teaching content of the morality and the rule of law course has practical at high level with (M=4.25, SD=0.68).

Discussion

1. The discussion of Students learn through learning together technique of cooperative learning have higher scores on learning achievement than before.The reason is that students' interest in learning can be stimulated and their self-efficacy in learning can be improved in cooperative learning. In addition, cooperative learning also promotes interpersonal

communication among primary school students through the training and use of interpersonal communication skills. For example, in the process of cooperative learning training, students are told how to listen to others, how to properly express their own views, how to debate appropriately when there is a difference of opinion, how to help each other in the learning process, how to work together to complete the team learning tasks. (Chen,2015).The use of Learning together technique of cooperative learning in the school classroom can maximize the ability of the students in the class to stop being outside the classroom and actively participate in the classroom teaching activities, thus making the teacher's "teaching" and the students' "learning" more effective, and over time the performance of the English course will be significantly improved. Over time, the performance of the ethics and rule of law course will be significantly improved. Furthermore, the learning together technique encourages all students to participate actively in classroom activities, thereby maximizing student engagement and making both teaching and learning processes more effective. Over time, this approach can significantly enhance student achievement, not only in language subjects but also in subjects that emphasize moral reasoning and legal understanding.

These findings are consistent with previous studies. For instance, Slavin (1995) emphasized that cooperative learning structures like learning together help build academic achievement by promoting peer support and individual accountability. Similarly, a study by Tran and Lewis (2012) found that students engaged in cooperative learning environments scored significantly higher in academic tests compared to those in traditional learning settings.

2. The discussion of students learn through learning together technique of cooperative learning have higher scores than 70 percent.This is because through the Learning Together technique of collaborative learning, students not only gained in knowledge acquisition, but also developed significant learning strategies, self-efficacy, critical thinking, and social skills, which together ultimately resulted in scores higher than 70%.Learning together technique of cooperative learning can not only improve students' interest in learning, motivation and attitude to learning but also improve students' ability to cooperate, i.e., cooperative goals, cooperative emotions and cooperative thinking are improved to varying degrees, and the teaching effect will be improved accordingly (Wang ,2023).Many empirical studies have shown that cooperative learning is superior to other teaching methods.(Jin,2013).so teachers should pay more attention to the performance of students in the classroom to improve the awareness of the study of cooperative learning and continue to teach.

3. The discussion of findings regarding student satisfaction after learning through the Learning Together technique of cooperative learning revealed that students expressed a high level of satisfaction. This result supports the notion that cooperative learning fosters positive emotional and cognitive experiences by organizing students into small groups where mutual assistance and shared goals enhance the overall learning atmosphere (Shao & Wu, 2021). The increased satisfaction may be attributed to several key aspects: 1) Enhanced Learning Experience – Cooperative learning transforms students from passive recipients to active constructors of knowledge. Through diversified tasks such as group discussions, collaborative projects, and role-playing, students become more engaged, which enhances their interest and

overall satisfaction with the learning process. This is consistent with the findings of Gillies (2006), who noted that students in cooperative settings were more motivated and displayed greater task engagement and enjoyment in learning. 2)Timely and Effective Feedback – Group-based learning facilitates frequent and immediate feedback from peers and teachers. This helps students recognize their progress, correct misunderstandings, and build confidence. Multiple channels of feedback—peer evaluations, teacher input, and group reflection—provide a comprehensive view of learning, contributing to a stronger sense of achievement. 3)Enhanced Social and Emotional Experience – Cooperative learning promotes stronger peer relationships, empathy, and communication. These interactions contribute to an increase in self-efficacy and emotional satisfaction, as learners feel supported, valued, and empowered in their learning communities. Research by Johnson and Johnson (2009) reinforces this, stating that cooperative learning leads to improved interpersonal relations, which is closely linked to student satisfaction and classroom harmony.

Recommendation

Recommendation for implication

Based on the findings from the study, the following recommendations are made:

1. Actively promote cooperative learning models:

Research has shown that cooperative learning methods using "learning together" technology are more effective than traditional teaching methods. Therefore, educators should actively promote cooperative learning and make it an important part of classroom teaching.

2. Define the goals and tasks of cooperative learning:

Before implementing cooperative learning, teachers should clarify the goals and tasks of cooperative learning to ensure that each student is clear about his or her roles and responsibilities. This helps avoid the formalization of cooperative learning and ensures that every student can actively participate and gain something.

3. Reasonable grouping to promote interaction:

Grouping is a key part of cooperative learning. Teachers should group students reasonably according to their abilities, interests and personalities in order to promote effective interaction and cooperation within the group. At the same time, teachers should encourage exchanges and collaboration among students to develop their team spirit and communication skills.

4. Provide necessary guidance and support:

In the process of cooperative learning, teachers should provide the necessary guidance and support in time to help students solve the problems and difficulties they encounter. Teachers can learn about students' learning progress and needs through observation, questioning and feedback, and adjust teaching strategies and methods in time.

5. Pay attention to individual differences and teach students according to their abilities:

Each student is a unique individual with different learning styles and needs. Therefore, in cooperative learning, teachers should pay attention to individual differences, tailor teaching to the needs of each student, and provide each student with learning resources and opportunities that are suitable for them. This helps to stimulate students' interest and motivation in learning and improve their learning results.

6. Emphasize evaluation and feedback:

Evaluation and feedback are an indispensable part of cooperative learning. Teachers should establish a scientific evaluation system to make a comprehensive and objective evaluation of students' learning outcomes. At the same time, teachers should give students timely feedback to help them understand their strengths and weaknesses, and clarify the direction and methods of improvement.

7. Encourage independent learning and inquiry:

Cooperative learning does not mean total dependence on members of the group. On the contrary, teachers should encourage students to engage in independent learning and inquiry to develop their independent thinking and problem-solving skills. This helps students to better adapt to changes and challenges in their future learning and work.

8. Continuously update teaching concepts and skills:

Educators should continuously keep abreast of the latest developments in the field of education and update their teaching concepts and skills. By attending training, reading literature, exchanging seminars and other ways, teachers can continuously improve their professionalism and teaching ability to provide students with better education services.

To sum up, based on the results of the cooperative learning research on "Learning together" technology, we can optimize the cooperative learning mode from various aspects and put forward effective suggestions to improve students' learning effect and comprehensive quality.

Recommendation for further research

1. Strengthen Theoretical and Empirical Foundations

Future research should deepen the theoretical grounding of the Learning Together technique by integrating motivation theory, cognitive development theory, and social interaction theory to better understand how it influences student learning. Large-scale empirical studies across subjects and age groups are also needed to verify its effectiveness and clarify its mechanisms for improving academic achievement, cognitive growth, and social skills.

2. Innovate and Diversify Teaching Approaches

Researchers are encouraged to explore innovative applications of the technique, such as combining it with project-based learning or flipped classrooms, to enhance its adaptability. Cross-cultural studies are also recommended to assess effectiveness in diverse educational contexts.

3. Address Individual Differences and Educational Equity

Future studies should investigate how Learning Together supports learners with varying cognitive abilities, learning styles, and emotional needs, aiming to create personalized learning strategies. In addition, research should examine its role in promoting equity, ensuring all students—including those from disadvantaged backgrounds—have access to meaningful learning opportunities.

4. Enhance Assessment and Feedback Systems

A comprehensive evaluation framework is needed to assess not only academic performance but also learning attitudes and social development. Furthermore, establishing a robust feedback mechanism involving students, teachers, and parents can help refine implementation and sustain effectiveness.

5. Integrate Technology and Digital Tools

Research should explore the integration of Learning Together with digital platforms, AI-driven systems, and online collaborative tools, enhancing learning experiences and enabling data-driven instructional decisions to support personalization and precision in teaching.

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